# Emergency Preparedness: Understanding Physicians' Concerns and Readiness to Respond

**Moderator: Loretta Jackson Brown**

**Presenter: Gillian SteelFisher, PhD, MSc, Steven Krug, MD, and Christopher Kang, MD**

**Date/Time: February 12, 2013 2:00 pm ET**

**NOTE:** This transcript has not been reviewed by the presenter and is made available solely for your convenience. A final version of the transcript will be posted as soon as the presenter's review is complete. If you have any questions concerning this transcript please send an email to **coca@cdc.gov.**

## Coordinator:

Welcome and thank you for standing by. All participants will be on listen-only until the question and answer session of today's conference. As a reminder, today's call is being recorded. If you have any objections, please disconnect at this time. I would now like to turn the call over to our first speaker, Ms. Loretta Jackson-Brown. Ma'am, you may begin.

## Loretta Jackson-Brown:

Thank you (Tanya). Good afternoon. I'm Loretta Jackson-Brown and I'm representing the Clinician Outreach and Communication Activity, COCA, with the Emergency Communications System at the Centers for Disease Control and Prevention. I'm delighted to welcome you to today's COCA Webinar, Emergency Preparedness: Understanding Physicians' Concerns and Readiness to Respond. We are pleased to have with us today Dr. Gillian SteelFisher, Dr. Steven Krug and Dr. Christopher Kang, here to discuss emergency preparedness and physicians' readiness to respond.

You may participate in today's presentation by audio only, via Webinar or you may download the slides if you are unable to access the Webinar. The PowerPoint slide set and the Webinar link can be found our COCA Web page at emergency.cdc.gov/coca. Click on COCA Calls. The Webinar link and the slide set can be found under the call-in number and call passcode.

At the conclusion of today's session, the participant will be able to discuss the knowledge, attitudes and behaviors that physicians have related to emergency preparedness, identify opportunities to improve emergency preparedness training and education for physicians and describe disaster medicine activities and resources to promote physician emergency readiness.

In compliance with continuing education requirements, all presenters must disclose and financial or other association with the manufacturers of commercial products, suppliers of commercial services or commercial supporters as well as any use of an unlabeled product or product under investigation of use. CDC, our planners and the presenters for this presentation do not have financial or other association with the manufacturers of commercial products, suppliers of commercial services or commercial supporters, with the exception of Dr. Gillian SteelFisher who would like to disclose that her spouse receives a consulting fee from Eli Lilly. This presentation does not include the unlabeled use of a product or products under investigational use. There was no commercial support for this activity.

At the end of the presentation, you will have the opportunity to ask the presenters questions. On the phone, dialing star 1 will put you into the queue for questions. You may submit questions through the Webinar system at any time during the presentation by selecting the Q&A tab at the top of the Webinar screen and typing in your questions. The presenters will answer all questions at the end of the session.

Our first presenter, Dr. Gillian SteelFisher, is the Assistant Director of the Harvard Opinion Research Program and a research scientist in the Department of Health Policy and Management at the Harvard School of Public Health. She directs Harvard's opinion research program on biological security and the public, which involves a series of polls at the international, national and state level to understand public response to the threat of health emergencies, including emerging infectious illnesses, foodborne illness and bioterrorism. Since joining the research team, Dr. SteelFisher has directed the group's analysis of the public's response to the H1N1 pandemic. She has published articles on public health topics in the "New England Journal of Medicine," "MMWR," "Bioterrorism and Biosecurity" and the "Journal of Food Safety." And she lectures regularly on the role of public opinion in health policy and the use of mixed methods to study public health problems.

Our second presenter, Dr. Steven Krug, is a Professor of pediatrics at the Northwestern University Feinberg School of Medicine. He heads the Division of Emergency Medicine at Ann & Robert H. Lurie Children's Hospital of Chicago. Dr. Krug has served in a number of leadership roles within the American Academy of Pediatrics. He currently serves as a Chairperson of Academy's Disaster Preparedness Advisory Council. Dr. Krug has been an active participant within emergency medical services for children's program at both state and national levels. He serves as a member of the National Biodefense Science Board and is the Editor in Chief of the Journal, "Clinical Pediatric Emergency Medicine." His areas of interest include emergency medical services for children, disaster preparedness, patient safety and care quality, clinical outcomes of emergency care, medical education, trauma system, access to healthcare and the economics of healthcare delivery.

Our last presenter is Dr. Christopher Kang. Dr. Kang is an Assistant Professor in the Physicians' Assistant Program at Baylor University, an Adjunct Assistant Professor at the Uniform Services University of the Health Sciences and a Clinical Assistant Professor at the University of Washington. Dr. Kang has been a core faculty member and residency research coordinator at Madigan Army Medical Center residency in emergency medicine since 2001. He serves on the American College of Emergency Physicians' Emergency Preparedness and Response Committee where he contributed to establishing the College's disaster research agenda. He was also the section co-editor for Disaster Medicine for the "Western Journal of Emergency Medicine" and peer manuscript reviewer for the "Journal of Environmental and Wilderness Medicine."

Again, the PowerPoint slide set and Webinar links are available from our COCA Web page at emergency.cdc.gov/coca.

At this time, please welcome Dr. SteelFisher.

**Gillian SteelFisher:**
Hello everyone. Thank you so much for having me today. My name is Gillian SteelFisher and I'm the Assistant Director of the Harvard Opinion Research Program here at the Harvard School of Public in Boston, Massachusetts, where we were currently - we were just blanketed by 24 inches of snow this weekend and so we have a particular appreciation for emergency and disaster response at the moment. And I'm really glad to be with you here today.

More generally, our research group here is dedicated to providing public health leadership with insights to help enhance outreach and communication about key public health issues through polling. And in this case, I was pleased to be a part of the COCA team to conduct a poll that would help them and others better understand physicians' views of emergency preparedness. I'm very pleased to be able to share those results with you today. So the goals for this project when I was brought in were quite high, as there were a number of areas that the team wanted to investigate and to consider in polling. And I've listed these out here. I've come up with seven to start, which included an overall assessment of physician preparedness, their views on staff preparedness, their awareness and participation in institutional preparedness activities such as drills, physician training, receipt of emergency preparedness information prior to an emergency, receipt of information during an emergency and the use of this information in outreach and patient education.

Now to make this even more challenging, we also wanted to consider four different types of emergencies in two types of care settings. So I wanted to make sure to address preparedness regarding a natural disaster like a hurricane or earthquake, a major outbreak of an airborne infection like pandemic influenza, a major foodborne illness outbreak or a chemical, biological, radiological, nuclear or explosive incident which I'll refer to as CBRNE. We also wanted to examine both the hospital setting where possible and non-hospital settings. And by that I mean things like private offices that are not affiliated with a hospital directly. And of course, physicians can - many of them can talk about both of these care settings so we wanted to be able to address that if possible.

So what we came up with was a poll that was ultimately conducted in mid-October to January from 2011 to 2012, so October 19 to January 11, 2012. It was organized by mail invitation to get a random sample. And then people could complete the poll through either the printed format in mail or in online format. We used a nationally represented sample of over 1600 practicing physicians. And then to ensure that the results were representative of that population, we weighted the data - which is standard practice in polling - to represent the U.S. population of practicing physicians. And we weighted it by specialty group, the census region of practice, the year of graduation from medical school, gender and ethnicity. And as you can see from the sort of immense range of topics that we wanted to cover, I may not be able to present all of the findings to you today but what I'm going to try to do is present a select highlighting of the key findings that I think will be most relevant to the audience today. And it should kind of give you the flavor. Now one that I have right here in cases is the kind of thing that bugs you when you're going through a presentation is that some of the summary statistics don't add up to 100% or the sum of the subsets just due to rounding or categories that aren't shown like someone refused a given question. So hopefully with that we can actually get into the meat of the matter and I can begin to share with you these results.

So let's start off right at the key topic. What we wanted to know was about physician and staff preparedness. How prepared do physicians think they are and how prepared do they think their staff are? Let's start with physicians themselves. We asked them as one of our main questions how prepared they thought they were personally to handle each of the following kinds of public health emergencies. And as you can see from the data that we've presented here, a majority, that is, between 56% and 61% said that they were prepared for a natural disaster, a major outbreak of an airborne infection like pandemic influenza or a major foodborne illness outbreak. Now we have a substantially smaller number who said they were prepared for a CBRNE incident. This is consistent with some of the other data that we've seen in the literature, although there is really not a substantial effort to - at this point, sort of body of work that would allow us to evaluate the degree to which physicians are prepared for these other kinds of initiatives. Most of the work has actually been done around CBRNE incidents.So overall we might be somewhat reassured that we have a majority of physicians saying that they are prepared for a - at least these three

kinds of emergencies, although particularly for things like pandemic influenza or a natural disaster, it seems likely that the extent of the number of physicians that need to be involved in a given incident may exceed sort of the roughly majority group, we really want all physicians to be prepared for this and so there's still really a need to increase those numbers.

When we asked them about their preparedness - the preparedness of their staff, excuse me - we were able to ask them both about the staff in their hospital department where relevant or in the non-hospital setting where relevant. And for some of these, physicians were able to answer separately about each of these kind of care settings where they practice. What you can see is that you see a little bit of the same pattern when you look overall. That is, that the staff were evaluated as being prepared for airborne infections, foodborne illness and natural disasters to a much greater extent than they were in regard to CBRNE incidents. And perhaps not unexpectedly, staff in hospital settings were considered more prepared than those in non-hospital settings. What did surprise me, I will say, is that the size of the gap is quite large. So, for example - and I'm hoping that this pointer works to allow you to see me where I'm pointing. If you look at the case of preparedness for pandemic influenza, you can see that the hospital staff that were evaluated, 76% of physicians thought they were prepared, either very or somewhat prepared, whereas only 46% of physicians said that the non-hospital staff was very or somewhat prepared. So this gap of 30 points, in my experience in polling, is pretty large, so something to take note of for sure.

Now we wanted to dig a little bit deeper into what this preparedness means. There's some of evidence, as I said, particularly around CBRNE incidents around the level of physician preparedness. But are they really aware of the preparedness efforts in institutions? Do they participate in related activities because these are such a core and critical component of actually being really prepared? These practice runs and so forth are so essential. So the first thing we asked physicians was whether or not they were aware of a written emergency response plan in their care setting. And what you can see, in fact, in the hospital setting, 53% said they were aware of this, that there was indeed a plan. Twenty-five percent in a non-hospital setting said the same. Two percent of physicians said no, there isn't a written plan in their hospital setting and 37% of those in a non-hospital setting said the same. What I think is most striking and perhaps somewhat surprising is this "don't know" measure. What we see here is that 44% of physicians in hospital settings weren't sure whether there was a written emergency response plan. And given the likelihood that nearly all hospitals will have such written emergency response plans, this number is a little worrisome in terms of physicians' engagement. We see that number 37% is a little more difficult to evaluate how meaningful that number is, you know, whether they're - the extent to which non-hospital settings have the same written emergency response plans is not quite as clear. But really sort of having this high fraction unaware of it is still worrisome. They

should know whether or not there is or isn't a written plan.

We further asked of those that did have a plan what did it include. You know, is it actually a comprehensive plan? And what you can see is that a majority of those who said there was a written plan said it incorporated some of the critical elements that we think should be in there. So it had a description of roles for each staff member. We're talking about 74%, 79%, a pretty strong majority of those who have a written plan, same in terms of having a communication plan to link all providers and administrative staff, a continuing operation plan for treating routine and overflow patients. The numbers start to drop a little bit here, though, when you talk about information sources for treating illnesses and injuries related to different kinds of emergencies, a patient triage plan with the names of alternative locations of care. Now you're really talking about a very slim majority, even of those who said there was a plan. I think one other thing to note is that the last component, which is a plan to reach out to your current patients, we find that really only 29% of those who had a - who in a hospital setting had this as part of the plan and just under half of those in a non-hospital setting said the same. So this is an area that particularly needs attention in terms of ramping up preparedness as creating a network to help protect patients in the end.

Now what about their involvement with the things that we build off of these plans, in particular practice drills? So just to sort of reiterate this point, we found out that 53% said their institution had a written plan in a hospital setting, 25% in a non-hospital setting. We then asked whether or not the institution itself had had a practice drill based on emergency written - written emergency plan in the past two years. We found that in total 35% of physicians said there had been such a practice drill in a hospital setting and 15% in a non-hospital setting. When we asked whether or not the physician her or himself had participated in such a practice drill in the past two years, and now the numbers are really low. So we're talking about 22% in the hospital setting, 12% in a non-hospital setting. So in terms of really engaging physicians in participation in practice drills, this is where we're really moving down. We also wanted to find out well, what kind of emergencies are these for? And so we asked of those who had actually participated in practice drills, what were the topics? And you can see here that natural disaster and CBRNE incidents were most commonly the topic in hospital settings and that when you started talking about other kind of things, even pandemic influenza, you start dropping down in numbers, even all hazards. The place where there was sort of fewest practice areas was a major foodborne illness outbreak.

So let's think about training, another place where physicians really can dig in on preparedness. Are they participating in training and what kinds of training are they doing? So - sorry, this looks like it jumped onto the wrong slide, I apologize. Okay, here we go. So we asked them whether or not they participated in training sessions in the past two years. And what I've done here is shown you sort of the total scale of

the frequency of their participation in the past two years. And then in the right column over here, summarizes of the ever in the past two years.

So what you see is that somewhere around 40%, somewhere between 30% to 40% have participated in each of these kinds of training sessions in the past couple of years. So these aren't huge numbers, even when you're talking about, again, sort of about all hazards. You're talking about 42% of physicians who participated at all in the past two years. We also wanted to find out well, if they are participating in training, what - where are they getting this training? Where is coming from? And what you can see from this slide is that the majority of physicians who participated are getting training from the hospital or clinic where they work. Much less commonly are other healthcare organizations involved, the state or local public health department, national physician organizations or federal agencies like the CDC, FEMA or FDA. We also wanted to find out about receiving information prior to an emergency. So are they getting information? And if so, what kind of information are they getting? So I'm showing you the same kind of scale here. And we asked people - or asked physicians how often are they personally receiving information, not formal training, about preparing for each of the following kinds of emergencies? And again, what I've done is summarize the sort of ever numbers here on the right. So you can see is that you're hitting again somewhere in sort of the just under or just over a majority of physicians. Just about half are getting information about each of these kinds of emergencies. And when we try to find out well, where are they getting it? Again, the hospital they work or most of their patients are admitted are really sort of rises to the top. They are getting some of their information from state or local public health departments. The outpatient setting is substantially less, but still notable. And that's really about the level or way you're talking about sort of getting information from federal agencies as well or national physician and clinician organizations, even a little lower. And then other healthcare organizations were still lower than that.

Now what about receiving information during an emergency? We wanted to find out whether or not physicians were signed up to get an alert, to get alerts in emergency, where they get them from and in an emergency, where they are likely to turn to information so we can think about kind of building a communication network for emergency response. So we asked first of all, are you signed up to get public health alerts during the following kinds of emergencies? And what you can see here is that we summarized each of the different kinds below so major outbreak of airborne infection, like about a quarter, same for a natural disaster, general emergencies of any kind and major foodborne illness or CBRNE incident. We also looked collectively at this - those are those top numbers and said okay, well, do they have any alerts for any of these topics? And just under a third said they had alerts. In my view, this is on the lower side and sort of an opportunity to build out and build a stronger communication network among physicians for emergency response. Where are these alerts coming from? So of those that have signed up to receive any alerts, you can see, again, a hospital where they work is really the core

resource. State or local public health departments, though, also play a critical role. And federal agencies like CDC or FEMA or FDA are slightly lower but they're on the map here. Other, sort of other organizations are much less, including national physician and clinician organizations, clinical journals or national emergency-oriented organizations like the Red Cross. So this is sort of where they're getting alerts now. But if they wanted to find out information about providing patient care, where would they turn? And here we see that 80% of physicians told us they were very or somewhat likely to turn to their hospital outpatient clinics for this information. So clearly the institutions have to have the information on hand, ready to distribute whenever it's needed. But in addition we see sort of that the state or local public health departments and federal agencies are really also playing really the same role. Really when you talk about percentages that are in sort of the 86, 84 percentile, you're looking really at these are really critical resources. And so in some ways it suggests there's an opportunity to build out across public health and healthcare to create a stronger network for support during emergencies.

Now the last area of inquiry in the poll itself was really looking at whether or not an - the extent to which some of this information was reaching across the sort of - across the examination table really. We wanted to find out about patient education in non-hospital settings, whether physicians were discussing preparedness with patients and if so, what were they discussing and if not, why not because we had a little bit of suspicion that they weren't doing a lot of discussion. And as this slide shows, our suspicion was correct, in my view, in somewhat dramatic terms. When we asked physicians who were practicing in non-hospital settings how often they personally discussed emergency preparedness with their patients, we found that fully 62% said never. They never discussed this topic. A quarter said they discuss it rarely and we've got 9% saying sometimes. But as a routine matter, really you're talking about 3%. So the extent to which this is sort of a part of the everyday communications is incredibly small. So when we think about, you know, of the people - of the physicians who are ever discussing this, what are they actually discussing? And we asked about some topics that we thought were important within the context of information for patients.And we see that 83% again of those who are ever discussing this say that they ever discuss overall emergency planning. We have about three-quarters saying they talk about getting needed care during an emergency, about the same number saying they talk to patients about having a two-week supply of prescription medications, creating an emergency kit at home, creating a communication and contact plan. The numbers sort of start to fall of here when we talk about preparing for an evacuation and sheltering-in-place. But also what's notable here, I think, is that my criteria for sort of ever discussing it is somewhat broad, I mean, including those who rarely discuss it. You know, and I'm talking about folks who even if it's in the sometimes level of criteria which is kind of this part of the bar that I'm dragging this pointer along, you see the numbers are really dramatically smaller. So even among those who say they ever discuss it, the frequency with which any of these given topics is discussed is limited. And so our sense of the sort of comprehensiveness of the information that patients are getting is really limited. So of course the actual question is, though, well, why not? Why aren't you discussing this

with patients? And I think the answers to these questions is often some of the most revealing kind of answers we can get. And here I think this is the case.

When we asked physicians who said they were not always discussing with patients - so we kept that kind of broad there so we could include more physicians and get more feedback - we see that 80% say that a major or minor reason is that it doesn't often occur to me to discuss the topic. So it's - I mean, in simple – in terms - this answer means this not on my radar.Perhaps what's a little bit more challenging in some ways is that 75%, that is nearly the same number, said that the topic is not within the scope of their current practice area, which suggests that even so if it were to become on their radar, they may or may not see as appropriate or within the scope of their current practice area. Sixty-two percent agree that their patients don't routinely need information about emergency preparedness. A little more than half said they don't have enough time with patients. About the same number said that they thought patients could get this information outside the organization. And a quarter said they might be able to get this information somewhere else within their own organization like the waiting room, so they felt like it was supplied from somewhere else. But that's the smallest reason.Really this is something about it not being relevant, it not being part of their scope of their practice. These are kind of fundamental reasons and answers that physicians are giving us.

So what does this all mean? I think here the key takeaways - and then we'll wrap up and move on to the next part of the presentation. So to summarize it quickly, I'd say a majority of physicians feel that they're prepared to handle many types of emergencies, including natural disasters, major airborne infectious disease and major foodborne illness outbreaks. But there are these gaps in preparedness as the poll points out. First, there are sort of slim majorities that feel prepared. There's room for improvement there. We still have a minority who feel prepared for a CBRNE incident. And staff in non-hospital settings are less prepared than their hospital-based counterparts.Physicians are not uniformly engaged in this. We have substantial numbers who aren't even aware of their emergency - written emergency response plans in their care settings. Small shares have participated in drills which are so key. And many really haven't received training in the past two years.Now when we think about some of the last area of inquiry - last two areas, physicians, they do receive moderate levels of emergency-related information, particularly before an emergency, but they're not signed up to receive alerts during an emergency and that's really a gap. They do expect to turn not only to their own institutions but also to local, state and federal public health authorities. And that may be an opportunity for partnership there. And finally the patients themselves are not being engaged in the process. The information really isn't crossing the examination table. A minority of physicians speak with their patients about emergency preparedness. Many don't even have this topic on their radar, feel the topic's important within the scope of their practice. And a minority of institutions have patient outreach in their plans. So these are key things for us to think about and to move forward with. Now with that, you know, I think the findings really suggest that the need for more creative thinking

about how to better engage physicians in the topic of preparedness. And so with that thought, maybe it's a good chance to move the microphone over to Dr. Steven Krug.

**Steven Krug:**

Hello. I'm hoping everybody can hear me. It's a privilege to be here today. And I would just sort of briefly summarize the data from the survey which was very interesting and actually aligns well with information we've seen before relating to readiness at a variety of levels, particularly surveys on hospital readiness. But let's also remember that this is a report of self-efficacy so chances are the survey actually overreports, overestimates the actual level of preparedness. People are inclined to say yes when the answer is no. And in fact, I think it's fair to say that our perception of preparedness is overstated. It's overstated by both folks who run hospitals as well as physicians who are working in practices. I think that practitioners are underinformed. They infrequently or rarely achieve training. They infrequently or rarely participate in drills. And it hasn't occurred to a lot of clinicians, including clinicians who work in primary care settings, including primary care settings where natural disasters are a fairly frequent occurrence where this has not apparently met the level of importance on the radar screen.So as stated, this suggests that we've got some work to do in terms of engaging physicians and then we need to be a bit more creative. And I would like to say - and this kind of gets me started - that there's an important role here for other participants, other partners in this process, including professional organizations. Let's see if I can move the slide. Here we go, okay. So on top of all this - so I'm just going to pull up all the things on this slide - part of the problem is - and this is shown in the survey - that the perception of readiness is certainly greatest in hospital-based settings because, in fact, hospitals are required to have a plan and hospitals are required to practice. Unfortunately, hospitals aren't required to make every practitioner in the hospital be part of the practice. And in many settings, the disaster drill doesn't get much further than the emergency department.

Separate to that, it's not just the hospital that needs to be prepared but also the medical home because the medical home is an essential component of perhaps not disaster response - though that may be in the fact - that may be the fact in a disaster that has a primary ambulatory encounter with the healthcare delivery system. But it's certainly an important component of disaster recovery and community resiliency. And that, you know, I think was best shown during and after Katrina. It's pretty clear that many physicians including pediatricians and families may not view disaster readiness as a priority concern. And I would argue that this is a key role for anybody who's maintaining a medical home for patients, whether they be an adult care provider, a specialty care provider or a pediatric care provider. On top of this - and again, I'm putting on my pediatrician's hat - most of the readiness that goes on throughout the United States is designed to meet the need for all hazards and all victims with a kind of a singular approach. And woven within this is the fact that even if we think that we're prepared, our level of preparedness for special populations, particularly children is not great.

And then the last piece is that the drills themselves, the plans themselves in their sort of general approach may not include sufficient considerations for children. And again, this is another place where anybody who cares about a special population or anybody who cares about community readiness can advocate for improvement. Part of the problem is that the folks who plan for these things, in their well-intended efforts, aren't supported at times by folks in the community who might help to inform their deliberations.

Several years ago, the American Academy of Pediatrics, in recognition that the problem of day-to-day readiness and disaster readiness was really a public health concern, created an advisory council. And the role of the DPAC, as we call ourselves, is to help the Academy to assure that it is as engaged as it can be as part of the solution both in terms of what's being done at the state and federal level and also in terms of within our organization, how can we help our member to become better informed, better - and better prepared. And on this slide you'll see that we have a handful of members who are hard at work at this. And we approach this as a collaboration. So we've been effective in part because we've developed really outstanding relationships with federal partners, the CDC, HHS, the FDA, DHS, the NIH, the Children's Hospital Association and many other professional organizations including ACEP. So this is really a - this is a team support. We have an ambitious plan, and the plan sort of reflects not just a pediatric perspective but also a perspective in terms of improving readiness for all Americans. We've worked hard to advance legislative and federal advocacy. I think that we were especially effective during the term of the National Commission on Children and Disasters. And we've continued to make great progress, again, because I think we've got a - we have a lot of great people in government who do care about readiness and who do care about kids who've been eager to work with us. We have been also focusing on a pediatric countermeasures agenda in part because we see that there's perhaps a relative gap in terms of the capability and the capacity of the strategic national stockpile in meeting the needs of kids because, as an example, kids can't swallow pills.We've worked hard to raise awareness of the unique pediatric preparedness principles as well as generic preparedness principles both within and external to the Academy. And we've worked hard to improve pediatric readiness at regional and state levels.We've developed a nice network of experts who have helped us to respond to a gratifyingly large request for input, so we appear to have opened the door. And we're working hard to make sure that we can help. And we've also worked to do a better job in terms of supporting the Academy members at - and/or state chapters and/or our sister pediatric societies and providers in the aftermath of disasters. And that's been going on for quite awhile but with each successful - successive disaster, I think we've become more effective in doing what little we can as a professional organization in providing support to our members and their patients. We've also worked very hard on the development of educational and training materials for pediatricians because one of the gaps here is that there really has not been an effective - or there

hasn't been an adequate amount of opportunities to learn about this. And in the - and in the valuable little amount of time that's available for practitioners to learn more about providing care to patients, you need to provide it in a manner that's user-friendly and available.

So we've increased the content of related education and CME available at our national meeting and at other meetings. We are working on collaborating with others on improving the pediatric content in a variety of disaster preparedness programs and working with one of our Academy members towards a course that will hopefully be perhaps more unique to the needs of the pediatricians. We're also working with pediatric trainees and their program directors to see if we can increase awareness and training that occurs during the pediatric development process. Let's create pediatricians who, when they started, are more aware of this issue and how they might meet the needs of patients and families.We're also working hard to increase the number of pediatricians who have an office and personal disaster plan because really every practitioner needs to have two plans, one for himself and/or herself and family because if the family's not safe, they're not going to feel like they can meet the needs of their patients.

And then the practice itself needs to have a plan for how it's going to meet the needs of patients after a power loss or after a crushing storm because this is one way that the Academy can help to deliver particularly care to patients in recovery and, again, help communities to become resilient. We are trying to get our pediatricians to make disaster readiness more of an agenda as part of their routine anticipatory guidance that they're providing to families. There's really good data demonstrating that if one's primary care provider provides one with this information that patients and families are twice as likely to actually develop a plan and twice as likely to actually practice that plan so we'd love to see that happen. And last, we've also been reaching out more frequently to our sister organizations and in international settings so that we can provide some small relief. This is a huge issue with a huge need in the international setting. We are trying to redefine the role of the pediatrician as it relates to this and we're doing this both in writing policy statements but also in getting the word out and getting information, material and resources out there to our members.

Again, the concept of personal preparedness and the balance between, again, assuring that your - you yourself are ready and that your family is ready and that your practice is ready, again, getting members more aware of how they can help families to be better prepared, getting members more involved in community preparedness, whether it's focusing on school and daycare to actually working with the local disaster planning entity or with their local hospital. Working at the state level, again, getting members involved to get involved at the state level, working with public health planners or - and/or disaster planners. And then, of course, last both providing education and convincing pediatricians that they can be a source of education to others and their community.

One of our many wonderful collaborations with the CDC was a meeting that we held about a year ago where we came together in the aftermath of the H1N1 experience and there were lots of lessons learned. And one of them was that maybe we could create a greater degree of synchrony between pediatricians and state chapters and their partner in state-based departments of public health because I think we saw - and I think the CDC saw - that the response by state or even by county varied tremendously depending upon the level of planning and synchrony. And there are a variety of topics that we asked these folks to come together. We were actually able to pull together ten state teams with two folks from the chapter and two folks from public health and in the aftermath, created some - hopefully some blueprints for action for chapters and state departments of public health to develop, essentially taking the good ideas as developed by others.What we learned from this meeting was the simple fact that having pediatricians - and again, you could insert any specialty into this - and public health at the same planning table was key. There's a long list of strategies that we've offered to our chapters and shared through our colleagues at the CDC with departments of health and, again, we're just getting started.But I think it's clear that if folks are communicating in advance of a bad event and are becoming familiar in advance of a bad event or a disaster and have, again, special considerations in there for the populations that are unique to that community that when something bad happens that perhaps we will be more together and maximize limited resources towards the greater good of all and that also that we might go out there together into the community conveying a shared message.Not only is it true for practitioners who may not look to the CDC and/or other federal or state-based providers of information as providers of useful information, but that's even perhaps more so for the public who might not even - some of them might not even trust government.

And so there's really an important role here for professional organizations and community-based physicians and/or hospital-based physicians to become that trusted voice who can echo the important things that are being acted - that are being sent by the public health. We've got lots of things that we're working on towards the future. Again, we've got lots of great collaboration with our federal partners. We're working on shared treatment guidelines. We've done, I think, a nice job of - on this with influenza that we're doing work towards smallpox and anthrax and I'm sure others. We're collaborating, again, with our federal partners on a countermeasure agenda. We're working with the DMAT program and the Assistant Secretary for Preparedness and Response Office on pediatric capabilities of the disaster response teams. And we're working with a variety of entities, including hospital organizations on things that we might do to promote improved surge capacity and/or the regionalization concept as a way to better meet the needs of kids.Perhaps our biggest challenge is to achieve the same synergy that we've developed at the federal level in each of the 50 states. It's fair to say that every state's different. And we are working with our chapters and our colleagues in each state to try to achieve that. As has been pointed out, what only - what really counts in disaster response is the local plan, not the federal plan.

And lastly, we're working hard to raise awareness and knowledge amongst our membership. And this occurs through continuing education, the development of training programs and resource development. We are writing policy and technical reports.And we are also - have been given an opportunity to insert anticipatory guidance related to emergency and disaster readiness into the next iteration of "Bright Futures," which is the Academy's anticipatory guidance program sort of playbook that's used by most pediatricians as they're providing guidance to families. The Academy has a lovely Web site which actually links wonderfully to major national organizations and all the federal entities so what we say is pretty much what everybody's saying at the national level. We do have unique resources available for our members and others, for families as well, relating to pediatric readiness. And it's one of those many tools that we are putting out there and constantly updating in an effort to make it as up-to-date and as user-friendly as possible. One of the observations that's been made repeatedly is that practices need to be better prepared. This is a resource kit that was developed by one of our DPAC members, Dr. Scott Needle. And the goal here is to provide a playbook or a guide for a practicing physician who wishes to be better prepared and better serve the needs of one's patients in the aftermath of a disaster. And again, all this information is available for free on the Academy Web site.

I want to thank you for listening. And again, while I am a pediatrician and a lot of my comments were sort of made about kids, you could probably say that - you could change my words slightly and they could probably apply to all populations. Again, I appreciate the opportunity to speak. And I think we're now going to pass the baton to our colleague from the American College of Emergency Physicians.

**Christopher Kang:**

Thank you Dr. SteelFisher and Dr. Krug. My name is Christopher Kang. On behalf of the American College of Emergency Physicians, I have the privilege of presenting the third part of this Webinar, engaging physicians in disaster preparedness.This portion of the Webinar will cover three topics. First, the importance of emergency preparedness to the American College of Emergency Physicians, also commonly referred to as ACEP, to review of its current organizations, practice policy and human resources. Next, how the American College of Emergency Physicians engages its members and promotes awareness in emergency preparedness as well as training through numerous references and opportunities. Lastly, a review of several recent federal grant projects that involve the American College of Emergency Physicians and various agencies within the federal government to collaborate with other healthcare personnel organizations as well as communities on promoting emergency preparedness.

As noted by Dr. SteelFisher and Dr. Krug, many physicians feel at least somewhat prepared for one or more types of disaster-related events or emergencies, but may not feel somewhat or well prepared for various other types of public health emergencies such as chemical, biological, radiological, nuclear and

explosive, or CBRNE, incidents. Thesefederal grant projects have produced numerous references in training that could be utilized to increase awareness of, participation in, confidence and thus hopefully also overall prepared - enriched preparedness for physicians and other members of the healthcare community. These resources are readily available and accessible for us. To understand the importance of emergency preparedness in our College of Emergency Physicians, it would be helpful to review the background and context of the organization. The American College of Emergency Physicians has over 30,000 members, running the gamut from medical students to resident physicians-in-training to practicing and even retired emergency physicians. These members hail from all 50 states, the District of Columbia, Puerto Rico and the government services, each represented by its own chapter. There are also numerous international members. In addition to the state and geographical chapters, each member may also belong to one or more of 32 sections that represent the specific area of interest within emergency medicine. Sections with relevance to emergency preparedness include the Air Medical, Disaster, EMS-Prehospital Care, Pediatric and Tactical sections. At its national headquarters, the American College of Emergency Physicians also has an EMS and Disaster Preparedness Division with its own dedicated staff led by Mr. Rick Murray.

Finally, there is a Disaster Preparedness and Response Committee. This committee is comprised of 35 members and has a similar role and objectives as the Advisory Council appointed by the American Academy of Pediatrics Board, presented earlier by Dr. Krug. It is currently chaired by Dr. Roy Alson. The Committee reports directly to the American College of Physicians and Board of Directors and the President of the College and is responsible for advising the Board of Directors on disaster-related issues and policies. Furthermore, the Committee also collaborates with some of the previously mentioned sections, such as Air Medical, Disaster and EMS-Prehospital Care sections.

Current projects for this year for the Disaster Preparedness Response Committee include but are not limited to the following, the development of a physician leadership training during a disaster. Having the right resources and personnel in place are important when responding to a disaster but almost equally as important is having physicians who are familiar with some of the fundamental principles and procedures necessary for an appropriate and effective initial response such as communication with prehospital personnel as well as hospital administrators, when to activate an emergency response plan if they're aware that one exists and how to assign and allocate limited personnel and resources until reinforcements arrive.Second project objective is to revise a disaster-related core curriculum for emergency medicine residency programs for the physicians-in-training. Third is to evaluate the use of crisis, sometimes also previously referred to as alternativestandards of care. Fourth is to identify the need for better educational content and techniques to improve emergency preparedness and response by hospitals. And fifth, to promote disaster-related research, including a movement to support legislation to classify all injuries and illnesses resulting from a declared disaster as reportable to public health.

Although it may seem inherent to this specialty, many practicing emergency physicians may not be interested or up-to-date on evolving disaster and emergency preparedness topics and issues. As a result, the American College of Emergency Physicians has developed and regularly updates and maintains a variety of resources and references. First, there are the members of all of the aforementioned sections as well as the Disaster Preparedness Response Committee. The Disaster section has over 550 members, while the EMS-Prehospital section has nearly 1000 members and the Pediatric section has over 800 members. Second, within these sections and the Disaster Preparedness Response Committee are numerous subject matter experts in their respective fields such as directors of the EMS systems, division and department chiefs, commanders of disaster medical assistance teams and instructors for disaster fellowship programs as well as the authors of numerous disaster medicine textbooks and references. The American College of Emergency Physicians also issues and revises multiple policy statements, several of which are pertinent to this discussion and include but not limited to. One, disaster planning and response which includes recommendations that emergency physicians at sister institutions and communities prepare for disasters but they also work with institutional and public communities to effectively communicate public health and be prepared to assume the role of crisis triage officer to allocate scarce resources when necessary. Two, support for the national disaster medical system. Three is a basic responsibilities and expectations both for the providers as well as the hospitals and public assistance related to a disaster medical response. And four, healthcare system surge capacity recognition, preparedness and response agenda which includes recommendations for facilities to integrate the plans with the regional disaster response programs involving other healthcare institutions including clinics as an advocate for legislation that when enacted may mitigate provider liability issues during crisis situations.

Lastly, there are multiple publications and textbook references as well as education opportunities. In addition to the numerous publications and textbooks, there's the "Annals of Emergency Medicine," a respected and one of the leading peer review university medical journals which periodically dedicates content specifically to EMS and prehospital care, disaster preparedness and CBRNE-related topics. There is also the annual national education conference traditionally known as the Scientific Assembly which also often includes several presentations on disaster medicine and emergency preparedness topics. Last year the conference was held in Denver and a special presentation and panel discussion featured several of the physicians who were involved in the response to the Aurora, Colorado shootings.

Moving on to the federal grant projects, moving from what is organic to the American College of Emergency Physicians and its members, there are several recent and current federal grant projects which reflect how the American College of Emergency Physicians had been seeking to address some of the findings identified and discussed by Dr. SteelFisher. Such as how to improve how prepared physicians

and healthcare personnel can be if they are to handle various public health emergencies, increase awareness of the existence of emergency response plan as well as the content and to engage an increased participation of physicians and other healthcare personnel with training and emergency preparedness.

The five projects that we'll briefly cover, I mentioned are with the CDC, Bombings, Injury Patterns and Care, also with the CDC, Patient Surge from Bombings, and with the Department of Homeland Security, Community Healthcare Disaster Preparedness Assessment, Hospital Evacuation Principles and Practices, and Disaster Hero. With the CDC Bombings, Injury Patterns and Care, originating in part from the 2004 Madrid and 2005 London bombings as well as other worldwide events including Operations Iraqi Enduring Freedom, the CDC Bombings, Injury Patterns and Care sought to help disseminate awareness of one or more of the common and most likely kinds of disaster-related injuries including terrorism bombing and explosive events. At its conclusion, the grant produced a one-hour presentation on blast injuries that was geared toward the entire spectrum of emergency personnel, from EMS to nurses to mid-level providers as well as physicians and covered the basic pathophysiology, assessment and treatment of common blast injuries. These presentations are available both in video and PowerPoint format. Additional resources that were also produced include 16 blast injury fact sheets, a wall chart with blast injury assessment and treatment information as well as a pocket guide of the same information and a computer-simulated disc with animated simulated blast event scenarios and four patient simulation cases.

Moving to the second grant project, the CDC Patient Surge from Bombings, most of the basic information regarding the pertinent basic assessment and treatment of blast injuries was compiled and disseminated. The next logical step was to explore how to manage the influx of a large surge of patients. During the Madrid 2004 bombing, one hospital received nearly 300 patients within the first several hours after the event. This now-concluding grant involved a two-year project evaluating EMS and hospital preparedness for patient surge from a terrorist bombing event. Its primary objectives were to identify and share basic, low-cost strategies to better manage surge capacity and response. After receiving injuries from over 300 agencies and hospitals, 50 facilities including EMS units and hospitals were evaluated, including rural and urban facilities. The project involved three phases, evaluation, implementation and tabletop exercise.

In Phase 1, the participating facilities compared their existing emergency response templates to ten CDC patient surge templates representing the key areas of an initial response to a surge of patients, including EMS, the emergency department, surgery, ICU, radiology, blood bank, the hospitalists, administration, pharmacy and nursing. Phase 2, the facilities then incorporated the ten CDC patient surge templates over a six-month period with each template containing a set of action steps. And finally in

Phase 3, five healthcare facilities were selected and then conducted tabletop exercises to assess implementation and evaluate the effectiveness of these new revised templates. Findings from the Phase 3 study included an overall average of 69% of the action steps when the ten templates were addressed. Policy revisions and additional training were the two main items needed to comply with the patient surge templates. And on average, those reported 12% increase in action step compliance over six months. The most common barrier - and it's no surprise - was cost or a lack of funding, especially for training.

Moving to the third project and the Department of Homeland Security Healthcare Disaster Preparedness Assessment was a $1 million federal grant to assess the medical response preparedness in 18 secondary cities. The results of these assessments were used to provide strategies to address various deficiencies in preparedness and response, to provide a framework to develop a functional plan to improve emergency preparedness through recommendations and planning assistance, to facilitate drills to test effectiveness of the enhanced emergency response plans.

And moving on from there, the fourth federal grant project is Department of Homeland Security, the Hospital Evacuation Principles and Practices which stemmed from some of the findings from this other grant. As with during Hurricane Katrina, the tornados in Alabama and Joplin, Missouri as well as most recently with Hurricane Sandy in New York City, hospital evacuation as a result of an internal or external disaster may be an evolving public health emergency scenario which for many physicians and even hospitals as well as their communities may not be prepared for.This grant resulted in the creation of a 90-minute training video that raised awareness of the underappreciated scenario and the basics for preparing for a hospital evacuation, whether it was planned or unplanned, immediate in nature or in anticipation of an impending disaster. The video may be viewed at the Web site noted on your screen.

The last project and federal grant to talk about is the Disaster Hero. With a new preparedness computer learning game designed for children grades 1 through 8, throughout the design and play of the game, basic principles of home emergency preparedness are presented, an issue already touched upon by Dr. SteelFisher and one of the objectives of the strategic plan of the Disaster Preparedness Advisory Council led by Dr. Krug. The game also provides instruction on basic self-aid until professional medical care is available and includes resources for parent and promotes teaching full emergency preparedness. This game is free to play at www.disasterhero.com as well as can be found on Facebook.

In summary, the American College of Emergency Physicians has the fundamental organizational structure, personnel and appreciation for the importance of emergency preparedness. The American College of Emergency Physicians also has and is still developing resources and engaging and training of the current and next generation of emergency physicians. And as noted by the recent projects, currently collaborates with multiple agencies and organizations for multi-risk emergency preparedness.

However, as highlighted and identified by Dr. SteelFisher and Dr. Krug, it is still clear that substantial work both within the medical community as well as our national community is still required. Some of the resources presented may be found at www.acep.org as well as the CDC Web site. If you should have any questions after the conclusion of the Webinar or would like to get any additional information or resources, please feel free to contact myself or Mr. Rick Murray at the American College of Emergency Physicians at the email addresses found on your screen.

This concludes my portion of the presentation, and I would now like to turn over the remainder of the Webinar to Ms. Jackson-Brown.

**Loretta Jackson-Brown:**
Thank you Dr. SteelFisher, Krug and Kang. We will now open up the lines for the question and answer session.

**Coordinator:**
Thank you. At this time we are ready for the question and answer session. If you'd like to ask a question, please press star 1. To withdraw your question, please press star 2. Once again to ask a question, please press star 1. One moment.

**Loretta Jackson-Brown:**
And while we're waiting for the first question for the phone, presenters, given the findings of the study, what do you think are the key areas that we need to address in physician preparedness? And I'll start with you, Dr. Kang, since you just finished.

**Christopher Kang:**
I think one of the most basic things is to have and appreciate the importance that it can occur anywhere at any time and that their role as providers is to care for both themselves as well as their family members, that this is a topic of relevance that occasionally may not require a lot of time but it's something that is of importance and an inherent responsibility.

**Loretta Jackson-Brown:**
Dr. Krug?

**Steven Krug:**
Well, I would reiterate what was just said. I mean I think that folks need to understand that this is really a public health issue and that a disaster, whether it’s natural or otherwise, that can occur

anywhere. I've think we've seen great evidence of that and that there is a role for everybody in this both from a personal readiness to do the right thing for yourself and your family but also do the right thing for your patients. And we need to convey a broader message of how really everybody who's in the - who is somehow engaged in the delivery of healthcare is part of the response and part of the recovery process.

**Loretta Jackson-Brown:**

And Dr. SteelFisher.

**Gillian SteelFisher:**

Well, thank you. Certainly in agreement as my colleagues just said, you know, I can't help but agree there. I think it's going to take some creative work. You know, the data that we have really suggests there are fundamental barriers. They don't recognize that this is really an area that is relevant to them. They're not seeing it as part of the scope of their practice. And that's the most difficult to change sort of from an attitudinal level. And so I guess to complement some of those kind of communications and outreach efforts that were just discussed, I would think about some really practical sort of engagement processes. I mean, I think it's very telling that you have such large percentages of physicians who don't even know if there's a written emergency response plan. They're not participating in these drills. There aren't sort of signals about what's going on and it doesn't give them the fluidity of practice that really makes them realize that they have a role to play. And so I think both - you know, I think there's got to be the two ends. It's got to be sort of the overall message and awareness and that piece of it. And at the same time we've really got to step it up on the operations side, making physicians aware of the written emergency response plans, engaging them and having them participate, getting them to engage their colleagues and partnering not only with the usual physicians but with hospital institutions that can help bring physicians into the fold. And I think sort of the other people - I'll say one more element which is that, you know, when I see how few physicians are signed up for alerts and emergencies, I mean, again, this is like a basic thing. This does not take a lot of time. You just have to sign up to get something notified to you on your phone or on your email. This is not a huge effort. But when the numbers are low it says to me, well, you know, in the case of emergency we have sort of a fragile communication work. We've seen lots of research suggesting that communication is the key issue during emergency response. And so building a stronger network, getting more physicians engaged even if it's just that basic level is sort of the toe in the water that may sort of bring us forward and give us some momentum to address this more completely.

**Loretta Jackson-Brown:**

Thank you. Operator, do we have any questions from the phone?

**Coordinator:**

Our first question, (Emeline Bergman), your line is open.

**(Emeline Bergman):**

This has been an excellent program. Thank you very, very much. I'm just - a simple question please. Could you repeat the Web site for the children's hero game? It was disasterhero.com but I think there was something after that.

**Christopher Kang:**

No, ma'am. It was www.disasterhero.com or it can also be found on Facebook.

**(Emeline Bergman):**

Oh all right. Thank you very, very much. And thanks to everyone for your information.

**Coordinator:**

Our next question, Amy Wishner. Your line is open.

**Amy Wishner:**

Hi, I had a - I guess sort of a comment and a question. One is I think with the health alerts, yes, we want pediatricians and other physicians to sign up for them but we also need to make them useful - more useful for pediatricians and other physicians. And there really isn't kind of a feedback loop to enable people to say, you know, this is what I would find useful and this is why I will sign up for it. And kind of along similar lines, I mean, the place that pediatricians interact with the Public Health Service is for the most part around the vaccines for children program, the VFC vaccines and the VFC nurses that go out to pediatric offices. And so here is this like Public Health workforce that's going into pediatric offices and it would really be great and sort of a good merging of departments to be able to have them involved in communicating emergency preparedness information and sort of strategies to pediatric offices. And I wondered if there was any kind of possibility - I mean, you know, vaccines intersect with emergency preparedness around sort of storage and handling issues and also around the medical reserve core who may at times be called upon to administer vaccines and their need for training to be sure that they're sort of up to speed with correct vaccine administration and storage and handling concepts. But I wonder if there's any thought about how to sort of augment that workforce that is already the link - a link between Public Health and community-based pediatricians.

**Steven Krug:**

This Steve Krug. I'll give this a shot. I mean, first of all, I agree with you. It's - you know, whenever you

can identify synergy, go for it. I'm not a community-based pediatrician so I must - I can't say for sure but let's just say I have reason to believe that the Public Health workforce is under-resourced in its own, although if there was some capacity that would make a great deal of sense to make that part of what the Public Health entity does when it interacts with a practitioner or a practice. In, I think, in the absence of an expanding Public Health workforce - and again I can't speak to what their capacity is - I think there are other opportunities for pediatricians and pediatric practices to get the information that they need. I mean, frankly, the Academy has a lot of information available about how practices can be better prepared. And, yes, all state and local public health sectors are a little different but preparedness concepts cross all of that. I think a lot of - and in talking to pediatricians, I think a lot of folks are not resistant to do this but are essentially saying things like "Well, I'm already in over my head as it is. How do I do this in addition to everything else?" And I think what we have to decide as a nation is whether we want to be reactive to disasters in public health emergencies or whether we're going to become a bit more proactive. And again, I think that's something that the professional organizations and the providers need to, I think, move towards. And that's what we've been trying to do with the Academy both at the national level and at the state level.

**Loretta Jackson-Brown:**
And I'll add - this is Loretta. And I'll add also Dr. Krug, we have a comment through the Webinar that is a - kind of dovetailed to what you just commented on and the young lady stated that they have had success with instituting preparedness in their training programs for their pediatric residency and they want to know if maybe this should be on a more national level for residency-type programs as well and if AAP is leading any of this charge, or if ACEP is doing anything as well with resident and training programs.

**Steven Krug:**
Well, I'll speak to the pediatricians and let my colleague talk about what ACEP or ABEM is doing with emergency medicine residents. We've actually had some contact with the responsible parties for residency education. That's not something that really the Academy owns but the resident and training group has a - probably the largest section or interest group within the Academy and the members have expressed interest. I think their program directors have expressed interest. And I think the goal is to take good ideas that are already happening out there - because there are some programs that have developed, I think, some unique ways of getting residents involved in drills - and getting residents more involved and more aware. And, you know, rather than re-create the wheel, see if we can't get those best practices out to the universe and also see if we can't get the program director group and/or their oversight body to perhaps suggest that this is something that all programs can do. You know, I've been trying to make these things work in my own institution and I've got a very sort of receptive audience here. But

my program director reminds me that she's already starting - struggling to meet the requirements as they stand. So it's a - it's a steep incline but I think we have the beginning of interest in the key places where eventually pediatricians, as they're going into practice, will be better prepared.

**Loretta Jackson-Brown:**
Dr. Kang, anything from Emergency Physicians for medical students in residency preparing them early to invest in disaster preparedness for their office, their practice?

**Christopher Kang:**
Yes. In short, that is an inherent part of all emergency medicine residency training programs to have some content both in practice as well as didactics on topics that would relate to disaster and emergency preparedness whether it's a CBRNE, whether it's an outbreak, an epidemic or triage. The question that I think - the problem comes down to, as alluded to by Dr. Krug, is as graduate medical education changes with new projects and new ways of doing things, such as the new Milestone Project, what is taught and how it's taught and when it's taught becomes a whole different ballgame. And with the agenda so full as they try to accommodate these new requirements, that's the one thing that, as I mentioned to you before, is one of the objectives of the Committee for the American College of Emergency Physicians is to try to determine if there's a set core of content that could be and should be taught during a residency. But how and when that's implemented is unfortunately a project still in progress.

**Loretta Jackson-Brown:**
Thank you. Operator, do we have any more questions on the phone?

**Coordinator:**
We do have other questions. Our next question, Dr. (Norman Castillo), your line is open.

(Norman Castillo):
Thank you. I'm an active member of the Medical Reserve Corps. All of the trainings that you've talked about I have had. I've had basic and intermediate HAZMAT as well. These trainings are available to anyone in our area and Medical Reserve Corps units are - exist across the country. All anyone needs to do is join. That just requires filling out a one-page form and submitting a copy of your driver's license and medical license. A background check is done but in our county nothing else is required. You can show up at trainings or not but the trainings are available and you get on a list and you'll get notified of every training that is available. There's also the Southeast Pennsylvania Regional Task Force. They give us notifications of trainings in the entire area. The - what we call the Tri-State area. I know there are multiple Tri-State areas but ours is Pennsylvania, Delaware and New Jersey. So these

trainings are out there. It's not something new that needs to be set up. It's just people have to put themselves on the mailing list to get notified. As far as alerts go, the same thing, it's easy to put yourself on the alert list. I'm expecting one this week as a practice. We do a drill every year. As far as the public knows, it's just to get free flu shots but it's a drill for us and the Medical Reserve Corps ran one of the three in our county and we gave over 1200 flu shots. So all this is available. All you have to do is look for it and sign up. I also noticed that none of the speakers mentioned anything about the Medical Reserve Corps. If you'd survey us you'd find out we know all about these things. Thanks.

**Loretta Jackson-Brown:**
Thank you. Operator.

**Coordinator:**
Our next question, (Ibad Khan), your line is open.

**(Ibad Khan):**
Thank you. Thanks again for an excellent Webinar. My question is it seems that most physicians rely on their hospitals and work places for readiness and preparedness information. What kind of steps can federal agencies like CDC and FEMA that have such a robust training material and outreach do to perhaps reach out to these hospitals and work places that thereby could, you know, filter the information down to the clinicians?

**Steven Krug:**
I guess I'll - this is Steve Krug. I mean, you're right. There's a tremendous amount of information out there including all sorts of educational materials and some of it rather beautiful that is available from a variety of federal sources including FEMA, including the CDC. What we try to do from a pediatrician's perspective is to try and get as much of this information that we think is relevant to our members because there's almost too much and then you're presented with, okay, so what of these things should I do. So we've tried to distill that both in some of the tools that we've developed for pediatricians as well as the information that we've linked to our site. Arguably, one doesn't need to make still another disaster preparedness course because there are probably several dozen out there already. And kudos to the person who commented earlier. I think that if we can get more physicians engaged in the Medical Reserve Corps, I think that preparedness overall would be greater. And that is still another thing we are trying to get, at least pediatricians, to become more engaged in.

**Loretta Jackson-Brown:**
Thank you. Operator, we have time for one more question.

**Coordinator:**
Our last question, please unmute your line and state your name.

**(Isaac Ashkenazy):**
Hello?

**Coordinator**:
Your line is unmuted, sir. Please state your name.

(Isaac Ashkenazy): (Isaac Ashkenazy).

**Coordinator:**
Your line is open. You may ask your question.

**(Isaac Ashkenazy):**
Thank you. This is (Isaac Ashkenazy) from Israel. Thank you for an excellent presentation and thank you CDC for a good thing for an excellent and educational conference. So I bless you but I think that we can't start from teaching physicians. We should start really early at schools teaching this at an early age, teaching our young generation not about emergencies but especially about saving lives, elevating resilience and helping behavior. It should start at age 10, at age 11 and then when you become a medical student it will be part of your educational tools. Emergencies - how to save lives. Even if in the future, if you would become a gynecologist or ophthalmologist, you should know how to save lives and by that how to elevate the resilience of the community, your resilience and also the resilience of your faith and your family, your mission of resilience. And physicians, in my opinion physicians - and I'm giving you the international perspective, I have some international experience in such issues. So all physicians should have mandatory training, again, not in emergencies because people - physicians don't like to talk about emergencies. They are busy. But they like to talk about saving lives, about elevating resilience, about road accidents. And this is enough and for physicians we have a few lessons.

First, you can't ask physicians to teach patients. This is not the right setting to talk with a patient about emergencies. But at the same time you should share something with the physicians. We should share – the federal and the state level should share with their physicians information. They don't get enough information about the threats. They don't have enough responsibility and they don't - we don't share with them expectations. The next thing about physicians is that instead of teaching patients, they should teach their communities, their family members, around their neighborhood. It should be part of the culture. They

should teach bystanders. And the last thing is in facility settings. In a facility like a clinic or hospital we need actually three levels of education. One is leadership. We need someone to lead the response. The second is specific goals, and specific goals, all of us who know what kind of specific goals we need in emergencies. And the last one is general rules. But the most important is not educating. It is training. The most important is training, exercising, playing games of emergencies.

And the last level is the federal level. The federal level should be part of the performance. They should create a common language. I am walking around the United States. And all over the country, in the United States there is no common language in hospitals. There is no - even terminology. I do not see terminology that is common in the United States. We need generics - the generic plans. We need also generic exercise drills and evaluations. This is also important for hospitals. Thank you.

**Christopher Kang:**
This is Chris Kang for (Dr. Ashkenazy). One, it's wonderful to hear from you agree more with some of your statements. I think it comes down to one word or another word as you alluded to. And I think it was mentioned before during some of our earlier discussions, is it's a mindset or culture and I couldn't. And once people can take the idea that it's a responsibility or an inherent part of it, whether it's a family in the community or whether it's providers in their setting, whether it's clinic or hospital, that is one of the big hurdles that was identified by Dr. SteelFisher and that is being - trying to be addressed by Dr. Krug. But it is going to be a long, hard battle.

**Gillian SteelFisher:**
This is Dr. SteelFisher, and I second all of that and it is nice to hear from you. I think other thing that I agree with is really related to the challenge of having physicians talk with patients in really sort of an incredibly time-constricted area. One way to think about this is to put a - prioritize this with patients who have disabilities or particular challenges that make them particularly vulnerable in certain kinds of emergencies and disasters. But to think more broadly about how to get outreach to patients that can benefit from some of the impact of having your physician talk with you about this because there is research that suggests that people are more likely to develop plans if their physician will tell them about it. But trying to get them to do that or find the time for it is the key issue. So I've seen innovative programs at hospitals where they invite patients in for sort of the broader sort of more general advice and they have a session on emergency preparedness. And I think some of the things that both of my colleagues were talking about, some resources that are available from their organizations can speak to that so that, you know, we can sort of benefit from the credibility that physicians have. But limit their actual time face-to-face with patients in places where we're not going to have success in having them reach out there and make it a more broad issue.

**(Isaac Ashkenazy):**
I agree just don't call them patients, as we can call them people. We can call them bystanders. And patients, they don't like it, we don't like it. As a physician, I don't like to call someone patient. It is not a patient. It is a disabler something like that.

**Loretta Jackson-Brown:**
On behalf of COCA, I would like to thank everyone for joining us today, with a special thank you to our presenters, Dr. SteelFisher, Dr. Krug and Dr. Kang. If you have additional questions for today's presenters, please email us at coca@cdc.gov. Put "February 12 COCA Call" in the subject line of your email and we will assure that your question is forwarded to the presenters for a response. Again, that address is C-O-C-A at C-D-C dot G-O-V. The recording of this call and the transcript will be posted to the COCA Web site at emergency.cdc.gov/coca within the next few days.

Free continuing education credits are available for this call. Those who participated in today's COCA conference call and would like to receive continuing education should complete the online evaluation by March 12, 2013 using course code EC1648. For those who will complete the online evaluation between March 13, 2013 and February 11, 2014, use course code WD1648. All continuing education credits and contact hours for COCA conference calls are issued online through TCEOnline, the CDC training and continuing education online system at www, the number 2, the letter A dot CDC dot gov/tceonline.

To receive information on upcoming COCA calls, subscribe to COCA by sending an email to coca@cdc.gov and write "Subscribe" in the subject line. Also, COCA has launched a Facebook page for health partners. Like our page at Facebook.com, CDC Health Partners Outreach to receive COCA updates.

Thank you again for being a part of today's COCA Webinar. Have a great day.

END